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**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: RANDY HARRIS *ET AL.*

APPLICATION NO.: 10/080,915

FILED: FEBRUARY 22, 2002

FOR: **APPARATUS WITH PROCESSING  
STATIONS FOR MANUALLY AND  
AUTOMATICALLY PROCESSING  
MICROELECTRONIC WORKPIECES**

EXAMINER: DONALD R. VALENTINE

ART UNIT: 1742

CONF. NO: 7799

**Information Disclosure Statement After First Office Action but  
Before Final Action or Notice of Allowance – 37 C.F.R. § 1.97(c)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. Timing of Submission

The information transmitted herewith is being filed *after* three months of the filing date of this application or after the mailing date of the first Office action on the merits, whichever occurred last, but *before* the mailing date of either a final action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, whichever occurs first. The references listed on the enclosed Form PTO-1449 (modified) may be material to the examination of this application; the Examiner is requested to make them of record in the application.

2. Cited Information

☒ Copies of the following references are enclosed:

- ☒ All cited references
- ☐ References marked by asterisks
- ☐ The following:

04/20/2004 ZJUHA1 00000115 10080915

02 FC:1806

180.00 OP

- ☐ Copies of the following references can be found in parent U.S. Application No. :
  - ☐ All cited references
  - ☐ References marked by asterisks
  - ☐ The following:
- ☐ This application was filed after 30 June 2003 and no copies of U.S. patents nor published applications are enclosed (See Notice of Deputy Commissioner Kunin on 11 July 2003).
- ☐ The following references are not in English. For each such reference, the undersigned has enclosed: (i) a translation of the reference; (ii) a copy of a communication from a foreign patent office or International Searching Authority citing the reference; (iii) a copy of a reference which appears to be an English-language counterpart; or (iv) an English-language abstract for the reference prepared by a third party. Applicant has not verified that the translation, English-language counterpart or third-party abstract is an accurate representation of the teachings of the non-English reference, though, and reserves the right to demonstrate otherwise.
  - ☐ All cited references
  - ☐ References marked by ampersands
  - ☐ The following:

3. Effect of Information Disclosure Statement (37 C.F.R. § 1.97(h))

This Information Disclosure Statement is not to be construed as a representation that: (i) a search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the cited information is, or is considered to be, material to patentability. In addition, applicant does not admit that any enclosed item of information constitutes prior art to the subject invention and specifically reserves the right to demonstrate that any such reference is not prior art.

4. Fee Payment (37 C.F.R. § 1.97(c)) or Certification (37 C.F.R. § 1.97(e))

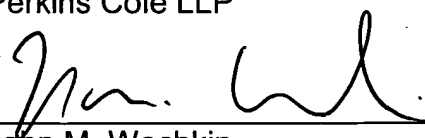
- ☒ Applicant elects to pay the fee under 37 C.F.R. § 1.17(p) \$180.00.
  - ☒ Check, which includes the \$180 fee, is enclosed.
  - ☐ Please charge the above fee(s) to Deposit Account No. 50-0665 this paper is provided in triplicate.

- ☐ Applicant submits that no fee is due in light of the following certification under 37 C.F.R. § 1.97(e) (check only one):
- ☐ In accordance with 37 C.F.R. § 1.97(e)(1), the undersigned hereby states that each item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to this filing of this statement; or
- ☐ In accordance with 37 C.F.R. § 1.97(e)(2), the undersigned hereby states that no item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c), more than three months prior to the filing of this statement.
- ☒ Please charge any underpayment for timely filing of this paper to Deposit Account No. 50-0665.

5. Patent Term Adjustment (37 C.F.R. § 1.704(d))

- ☐ The undersigned states that each item of information submitted herewith was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this statement. 37 C.F.R. § 1.704(d).

Respectfully submitted,  
Perkins Coie LLP

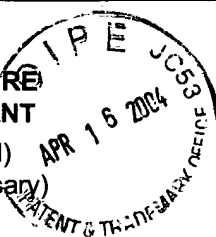
  
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Date: April 15, 2004

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
Form PTO-1449 (Modified)  
(Use several sheets if necessary)



**COMPLETE IF KNOWN**

Application Number	10/080,915
Confirmation Number	7799
Filing Date	February 22, 2002
First Named Inventor	Randy Harris
Group Art Unit	1742
Examiner Name	Donald R. Valentine
Attorney Docket No.	29195-8173US1

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**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
		09/679,928		Woodruff et al.	10/05/00	
		60/129,055		McHugh	04/13/99	
		60/143,769		McHugh	07/12/99	
		60/182,160		McHugh et al.	02/14/00	
		60/206,663		Wilson et al.	05/24/00	
		1,526,644		Phinney	02/17/25	
		1,881,713		Laukel	10/11/32	
		2,256,274		Boedecker et al.	09/16/41	
		4,046,105		Gomez	09/06/77	
		4,304,641		Grandia et al.	12/08/81	
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		4,495,453		Inaba et al.	01/22/85	
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		4,634,503		Nogavich	01/06/87	
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		4,949,671		Davis et al.	08/21/90	
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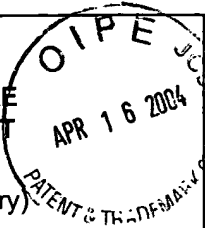
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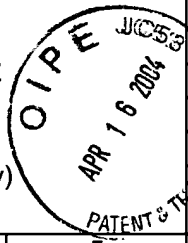
Examiner Initials*	Cite No.	U.S. Patent or Application		Name of Patentee or Inventor of Cited Document	Date of Publication or Filing Date of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		NUMBER	Kind Code (if known)			
		5,000,827		Schuster et al.	03/19/91	
		5,061,144		Akimoto et al.	10/29/91	
		5,064,337		Asakawa et al.	11/12/91	
		5,135,636		Yee et al.	08/04/92	
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		5,156,174		Thompson et al.	10/20/92	
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		5,256,274		Poris	10/26/93	
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		5,684,713		Asada et al.	11/04/97	
		5,700,127		Harada et al.	12/23/97	

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		NUMBER	Kind Code (if known)			
		5,711,646		Ueda et al.	01/27/98	
		5,723,028		Poris	03/03/98	
		5,731,678		Zila et al.	03/24/98	
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		6,110,346		Reid et al.	08/29/00	
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		6,159,354		Contolini et al.	12/12/00	
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		6,168,695		Woodruff et al.	01/02/01	
		6,179,983		Reid et al.	01/30/01	

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Sheet	4	of	5	Attorney Docket No.	29195-8173US1

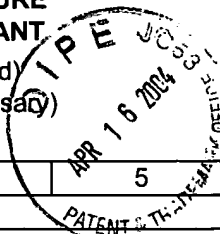
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		6,193,859		Contolini et al.	02/27/01	
		6,199,301		Wallace	03/13/01	
		6,234,738		Kimata et al.	05/22/01	
		6,322,677		Duncan	11/27/01	
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		Office	NUMBER	Kind Code (if known)				
		WO	00/02808		Semitool, Inc.	01/20/00		
		WO	00/61498		Semitool, Inc.	10/19/00		
		WO	00/61837		Semitool, Inc.	10/19/00		
		WO	01/90434		Semitool, Inc.	11/29/01		
		WO	02/097165		Semitool, Inc.	12/05/02		
		WO	02/099165		Semitool, Inc.	12/12/02		

OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	T
		LEE, TIEN-YU TOM et al., "Application of a CFD Tool in Designing a Fountain Plating Cell for Uniform Bump Plating of Semiconductor Wafers," IEEE Transactions On Components, Packaging and Manufacturing Technology – Part B, February 1996, pp 131-137, Vol 19, No. 1, IEEE	
		MAGNUM, "The perfect partnership of process excellence and production control in a fully-automated platform," (1996), pp 1-12, Semitool, Inc.	

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		RITTER, G., et al., "Two-And Three-Dimensional Numerical Modeling of Copper Electroplating for Advanced ULSI Metallization," June 1999, 13 pgs, E-MRS Conference Symposium M. <i>Basic Models to Enhance Reliability</i> , Strasbourg, France	

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